| | | |
|---|---|---|
| Name of Faculty | Dr. Ashutosh Sahu | |
| Designation | Assistant Professor | |
| Nature of Job/Appointment | Regular | |
| Date of Joining | 07-03-2022 | |
| E-mail | ashutosh_mech@cbit.ac.in | |

| Education Qualifications | **Name of the Degree** | **Class** |
|---|---|---|
| Ph.D. | Doctor of Philosophy (Metallurgical and materials engineering), IIT Kharagpur | Awarded |
| PG | M.Tech (Metallurgical Engineering) IIT-BHU Varanasi | First class |
| UG | B.Tech (Mechanical Engineering) GIET Gunupur under BPUT Odisha | First class |

| | |
|---|---|
| Work Experience | |
| Teaching | 3 years and 4 months |
| Research | 2 years and 6 months |
| Industry | 1 year and 10 months |
| Others | --- |
| Area of Specialization | Powder metallurgy, physical metallurgy, metal forming, foundry |
| Professional Memberships | |
| Responsibilities held at Institution Level | |
| Responsibilities held at Department Level | Sub criteria in-charge for criteria 4 for NBA, Maintenance of research publications |
| Research Guidance | |
| Awards Received | -- Best faculty and best researcher award |
| Courses Handled at Under Graduate / Post Graduate Level | -- CAD&D, R&D, Organizational Behavior, Nanomaterials Technology |
| No. of Papers Published | National Journals – 00 International Journals – 14<br>National Conference – 00 International Conference – 02 |
| Projects Carried out | -- |
| Patents | -- |
| Technology Transfer | -- |
| Invited Speaker | -- |
| No. of Books/Chapter Published with details | -- |
| Details of Short-Term Training Programs / Faculty Development Programs / Seminars / Workshops. Other Trainings (**Attended and/or Organized**) | 7 attended, 2 organized |
| Details of Journal Publications / Conferences (**National and International**) | |

**International Journal:**

1. **A. Sahu**, R. S. Maurya, T. Laha, Advances in synthesis and characterization of aluminum based amorphous alloys: A review, Advanced Engineering Materials, 26 (2024) 2301150.
2. **A. Sahu**, L.K. Singh, R.S. Maurya, Effect of milling parameters and milling energy on amorphization: A review, Transactions Indian Institute of Metals, 76 (2023) 2033-2042.
3. **A. Sahu**, R.S. Maurya, L.K. Singh, T. Laha, Analyzing the effects of milling and sintering parameters on crystalline phase evolution and mechanical properties of $Al_{86}Ni_8Y_6$ and $Al_{86}Ni_6Y_{4.5}Co_2La_{1.5}$ amorphous ribbons, https://doi.org/10.1007/s40195-021-01341-y.
4. **A. Sahu**, R.S. Maurya, S. Dinda, T. Laha, Phase evolution-dependent nanomechanical properties of $Al_{86}Ni_8Y_6$ and $Al_{86}Ni_6Y_{4.5}Co_2La_{1.5}$ spark plasma-sintered bulk amorphous composites, Metallurgical and Materials Transactions A 51A (2020) 5110-5119.
5. R.S. Maurya, **A. Sahu**, T. Laha, Nanoindentation study on $Al_{86}Ni_8Y_6$ glassy alloy synthesized via mechanical alloying and spark plasma sintering, International Journal of Materials Research 111 (2020) 1-8.
6. **A. Sahu**, R.S. Maurya, T. Laha, Non-isothermal crystallization behavior of $Al_{86}Ni_8Y_6$ and $Al_{86}Ni_6Y_{4.5}Co_2La_{1.5}$ melt-spun ribbons, milled ribbon particles and bulk samples consolidated by spark plasma sintering, Thermochimica Acta 684 (2020) 1-11.
7. **A. Sahu**, R.S. Maurya, T. Laha, Comparative study on sintering behavior of $Al_{86}Ni_6Y_{4.5}Co_2La_{1.5}$ mechanically alloyed amorphous powder and melt-spun ribbon, Advanced Powder Technology 30 (2019) 691-699.
8. **A. Sahu**, R.S. Maurya, T. Laha, Effect of sintering temperature on phase evolution of $Al_{86}Ni_6Y_{4.5}Co_2La_{1.5}$ bulk amorphous composites synthesized via mechanical alloying and spark plasma sintering, Progress in Natural Science: Materials International 29 (2019) 32-40.
9. T. Thomas, C. Zhang, **A. Sahu**, P. Nautiyal, A. Loganathana, T. Laha, B. Boesl, A. Agarwal, Effect of graphene reinforcement on the mechanical properties of $Ti_2AlC$ ceramic fabricated by spark plasma sintering, Materials Science and Engineering A 728 (2018) 45-53.
10. A. Loganathan, **A. Sahu**, C. Rudolf, C. Zhang, S. Rengifo, T. Laha, B. Boesla, A. Agarwal, Multi-scale tribological and nanomechanical behavior of cold sprayed $Ti_2AlC$ MAX phase coating, Surface and Coatings Technology 334 (2018) 384-393.
11. R.S. Maurya, **A. Sahu**, T. Laha, Effect of sintering temperature on phase transformation during consolidation of mechanically alloyed $Al_{86}Ni_6Y_6Co_2$ amorphous powders by spark plasma sintering, Journal of Non-Crystalline Solids 453 (2016) 1-7.
12. R.S. Maurya, **A. Sahu**, T. Laha, Microstructural and phase analysis of Al based bulk metallic glass synthesized by mechanical alloying and consecutive spark plasma sintering with varying consolidation pressure, Advanced Materials Letters 7 (2016) 187-191.
13. R.S. Maurya, **A. Sahu**, T. Laha, Quantitative phase analysis in $Al_{86}Ni_8Y_6$ bulk glassy alloy synthesized by consolidating mechanically alloyed amorphous powder via spark plasma sintering, Materials and Design 93 (2016) 96-103.
14. R.S. Maurya, **A. Sahu**, T. Laha, Effect of consolidation pressure on phase evolution during sintering of mechanically alloyed $Al_{86}Ni_8Y_6$ amorphous powders via spark plasma sintering, Materials Science and Engineering A 649 (2016) 48-56.

**International Conferences:**

1. **A. Sahu**, A. Behera, Semi-solid processing and tribological characteristics of Al-Cu Alloy, Materials Today: Proceedings 2 (2015) 1175-1182.
2. A. Behera, S. Aich, a. Behera, **A. Sahu**, processing and characterization of magnetron sputtered Ni/Ti thin film and their annealing behaviour to induce shape memory effect, Materials today: proceedings 2 (2015) 1183-1192.